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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,379	02/14/2002	Kohji Hashimoto	JP9-2001-0021-US1	1345

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EXAMINER	
LAZARO, DAVID R	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,379	HASHIMOTO, KOHJI	
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *13-16,24,25,33 and 34* is/are allowed.

6)☒ Claim(s) *1-12,17-23,26-32 and 35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on 01/30/06, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

2. Claims 1-35 are pending in this office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 11, 17, 20, 23, 26, 29, 32 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 5, 20 and 29 recite the limitation "the packet for polling". There is insufficient antecedent basis for this limitation in the claim.

6. Claims 11, 23 and 32 recite the limitation "the polling". There is insufficient antecedent basis for this limitation in the claim.

7. Claims 17, 26 and 35 recite the limitation "the polling". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-12, 17-23, 26-32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,297,143 by Fridrich et al. (Fridrich) in view of U.S. Patent 6,629,149 by Fraser et al. (Fraser).

10. With respect to Claims 1, 18 and 27, Fridrich teaches a network system (and corresponding method and program) that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, wherein said server comprises:

a ID information storage section for storing IDs of each of the clients, wherein each of the clients is granted a ID that is identifiable (Col. 23 lines 27-44 and Col. 24 lines 11-22 - Member number); and

a polling transmission section for transmitting a packet for polling to the clients by means of broadcast or multicast, wherein the packet contains information about the IDs of the clients that need or need not reply to the polling (Col. 23 lines 27-44 and Col. 24 lines 11-22 - reminder message indicates which Member number need or need not respond); and

wherein said client comprises:

a ID information storage section for storing its own ID information (Col. 24 lines 11-22 - a client must know its own member number in order to interpret the reminder message) ;

a determination section for determining whether or not to reply based on whether its own ID is contained in the packet for polling that has been received by means of broadcast or multicast (Col. 24 lines 11-22); and

a reply section for replying or not replying to the server based on the determination made by said determination section (Col. 24 lines 11-22).

Fridrich does not explicitly disclose the id is a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. Fraser teaches the use of a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent (Col. 8 line 27 - Col. 9 line 11

- Device Identity Field which can be a mixture of characters and numerals from manufacturer codes, serial numbers and the year).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Fridrich and modify it as indicated by Fraser such that the ID is a permanent ID, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. One would be motivated to have this, as there is need for providing a persistent, globally unique identity for devices that can be coupled to the network (In Fraser: Col. 3 lines 52-63).

11. With respect to Claim 2, Fridrich further teaches wherein said polling is associated with non-receipt at said server of an ACK or NACK from said clients in response to transmission of file data from said server to said clients (In Fridrich: Col. 23 lines 27-56).

12. With respect to Claims 3, 19 and 28, Fridrich teaches a server (and corresponding method and program) in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, comprising:

a ID information storage section for storing IDs of each of the clients, wherein each of the clients is granted a ID that is identifiable (Col. 23 lines 27-44 and Col. 24 lines 11-22 - Member number); and

a polling transmission section for transmitting a packet for polling to the clients by means of broadcast or multicast, wherein the packet contains information about the IDs of the clients that need or need not reply to the polling (Col. 23 lines 27-44 and Col. 24 lines 11-22 - reminder message indicates which Member number need or need not respond).

Fridrich does not explicitly disclose the id is a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. Fraser teaches the use of a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent (Col. 8 line 27 - Col. 9 line 11 - Device Identity Field which can be a mixture of characters and numerals from manufacturer codes, serial numbers and the year).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system (and corresponding method and program) disclosed by Fridrich and modify it as indicated by Fraser such that the ID is a permanent ID, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. One would be motivated to have this, as there is need for providing a persistent, globally unique identity for devices that can be coupled to the network (In Fraser: Col. 3 lines 52-63).

13. With respect to Claim 4, Fridrich further teaches wherein said polling is associated with non-receipt at said server of an ACK or NACK from said clients in

response to transmission of file data from said server to said clients (In Fridrich: Col. 23 lines 27-56).

14. With respect to Claims 5, 20 and 29, Fridrich teaches a client (and corresponding method and program) in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, comprising:

a ID information storage section for storing its own ID information, wherein each of the clients is granted a ID that is identifiable (Col. 23 lines 27-44 and Col. 24 lines 11-22 - Member number, noting a client must know its member number to be able to respond to the reminder message);

a determination section for determining whether or not to reply based on whether its own ID is contained in the packet for polling that has been received by means of broadcast or multicast (Col. 24 lines 11-22); and

a reply section for replying or not replying to the server based on the determination made by said determination section (Col. 24 lines 11-22).

Fridrich does not explicitly disclose the id is a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. Fraser teaches the use of a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent (Col. 8 line 27 - Col. 9 line 11

- Device Identity Field which can be a mixture of characters and numerals from manufacturer codes, serial numbers and the year).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the client (and corresponding method and program) disclosed by Fridrich and modify it as indicated by Fraser such that the ID is a permanent ID, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. One would be motivated to have this, as there is need for providing a persistent, globally unique identity for devices that can be coupled to the network (In Fraser: Col. 3 lines 52-63).

15. With respect to Claim 6, Fridrich further teaches wherein said polling is associated with non-receipt at said server of an ACK or NACK from said clients in response to transmission of file data from said server to said clients, and wherein said reply section puts its client's own permanent ID information in a reply packet to said server (In Fridrich: Col. 23 lines 27-56).

16. With respect to Claims 7, 21 and 30, Fridrich teaches a network system (and corresponding method and program) that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, wherein said server comprises:

a ID information storage section for storing of each of the clients, wherein each of the clients is granted a ID that is identifiable (Col. 23 lines 27-44 and Col. 24 lines 11-22 - Member number);

a notification of information transmission section for transmitting a packet for notification of information to the clients by means of broadcast or multicast, wherein the packet contains information about the IDs of the clients that need or need not reply to a polling packet sent afterward (Col. 23 lines 24-44 and Col. 24 lines 11-22 - reminder message indicates which Member number need or need not respond); and

a polling transmission section for transmitting a packet for polling to the clients by means of broadcast or multicast after said notification of information transmission section transmits the packet for notification of information(Col. 24 lines 28-35 - polling continues after an initial timeout), and

wherein said client comprises:

a ID information storage section for storing its own ID information (Col. 24 lines 11-22 - a client must know its own member number in order to interpret the reminder message);

a determination section for determining whether or not to reply to the polling afterward based on whether its own ID is contained in the packet for notification of information that has been received by means of broadcast or multicast (Col. 24 lines 11-35); and

a reply section for replying or not replying to said server in response to the packet for polling received by means of broadcast or multicast based on the determination made by said determination section after receipt of the packet of said notification of information (Col. 24 lines 11-35).

Fridrich does not explicitly disclose the id is a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. Fraser teaches the use of a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent (Col. 8 line 58 - Col. 9 line 11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Fridrich and modify it as indicated by Fraser such that the ID is a permanent ID, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. One would be motivated to have this, as there is need for providing a persistent, globally unique identity for devices that can be coupled to the network (In Fraser: Col. 3 lines 52-63).

17. With respect to Claim 8, Fridrich further teaches wherein said notification of information is associated with receipt or non-receipt at said server of an ACK or NACK from said clients in response to transmission of file data from said server to said clients (Col. 23 lines 23-27), and wherein said polling is associated with non-receipt at said server of an ACK or NACK from said clients in response to the transmission of the file data from said server to said clients (Col. 24 lines 22-27).

18. With respect to Claims 9, 22 and 31, Fridrich teaches a server (and corresponding method and program) in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a

communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, comprising:

a ID information storage section for storing of each of the clients, wherein each of the clients is granted a ID that is identifiable (Col. 23 lines 27-44 and Col. 24 lines 11-22 - Member number);

a notification of information transmission section for transmitting a packet for notification of information to the clients by means of broadcast or multicast, wherein the packet contains information about the IDs of the clients that need or need not reply to a polling packet sent afterward (Col. 23 lines 24-44 and Col. 24 lines 11-22 - reminder message indicates which Member number need or need not respond); and

a polling transmission section for transmitting a packet for polling to the clients by means of broadcast or multicast after said notification of information transmission section transmits the packet for notification of information(Col. 24 lines 28-35 - polling continues after an initial timeout)

Fridrich does not explicitly disclose the id is a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. Fraser teaches the use of a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent (Col. 8 line 58 - Col. 9 line 11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Fridrich and modify it as indicated by Fraser such that the ID is a permanent ID, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. One would be motivated to have this, as there is need for providing a persistent, globally unique identity for devices that can be coupled to the network (In Fraser: Col. 3 lines 52-63).

19. With respect to Claim 10, Fridrich further teaches wherein said notification of information is associated with receipt or non-receipt at said server of an ACK or NACK from said clients in response to transmission of file data from said server to said clients (Col. 23 lines 23-27), and wherein said polling is associated with non-receipt at said server of an ACK or NACK from said clients in response to the transmission of the file data from said server to said clients (Col. 24 lines 22-27).

20. With respect to Claims 11, 23 and 32, Fridrich teaches a client (and corresponding method and program) in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, comprising:

a ID information storage section for storing its own ID information, wherein each of the clients is granted a ID that is identifiable (Col. 23 lines 27-44 and Col. 24 lines

11-22 - Member number, noting a client must know its member number to be able to respond to the reminder message);

a determination section for determining whether or not to reply to the polling afterward based on whether its own ID is contained in a packet for notification of information that has been received by means of broadcast or multicast (Col. 23 lines 23-44 and Col. 24 lines 11-22); and

a reply section for replying or not replying to said server in response to a packet for polling received by means of broadcast or multicast based on the determination made by said determination section after receipt of the packet of said notification of information (Col. 24 lines 11-22).

Fridrich does not explicitly disclose the id is a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. Fraser teaches the use of a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent (Col. 8 line 27 - Col. 9 line 11 - Device Identity Field which can be a mixture of characters and numerals from manufacturer codes, serial numbers and the year).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the client (and corresponding method and program) disclosed by Fridrich and modify it as indicated by Fraser such that the ID is a permanent ID, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. One would be

motivated to have this, as there is need for providing a persistent, globally unique identity for devices that can be coupled to the network (In Fraser: Col. 3 lines 52-63).

21. With respect to Claim 12, Fridrich further teaches wherein said notification of information is associated with receipt or non-receipt at said server of an ACK or NACK from said clients in response to transmission of file data from said server to said clients (Col. 23 lines 23-27), and wherein said polling is associated with non-receipt at said server of an ACK or NACK from said clients in response to the transmission of the file data from said server to said clients (Col. 24 lines 22-27).

22. With respect to Claims 17, 26 and 35, Fridrich teaches a client (and corresponding method and program) in a network system that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network, comprising:

a ID information storage section for storing its own ID information, wherein each of the clients is granted a ID that is identifiable (Col. 23 lines 27-44 and Col. 24 lines 11-22 - Member number, noting a client must know its member number to be able to respond to the reminder message);

a determination section for determining whether or not to reply to the polling based on whether its own ID is contained in the packet for polling itself or notification of information prior to the polling that has been received by means of broadcast or multicast (Col. 23 lines 23-44 and Col. 24 lines 11-27); and

a reply section for replying or not replying to the server based on the determination made by said determination section (Col. 24 lines 11-22).

Fridrich does not explicitly disclose the id is a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. Fraser teaches the use of a permanent ID such that each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent (Col. 8 line 27 - Col. 9 line 11 - Device Identity Field which can be a mixture of characters and numerals from manufacturer codes, serial numbers and the year).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the client (and corresponding method and program) disclosed by Fridrich and modify it as indicated by Fraser such that the ID is a permanent ID, wherein each of the clients is granted an unchangeable permanent ID in a textual representation that is mutually identifiable and permanent. One would be motivated to have this, as there is need for providing a persistent, globally unique identity for devices that can be coupled to the network (In Fraser: Col. 3 lines 52-63).

Allowable Subject Matter

23. Claims 13-16, 24, 25, 33 and 34 are allowed.

24. The following is a statement of reasons for the indication of allowable subject matter: The primary reasons for allowance of Claims 13-16, 24, 25, 33 and 34 are the inclusion of the following limitations as a whole in a network and server system (and

corresponding method and program) that supports unicast as a communication scheme from a server to one client in a network, multicast as a communication scheme from the server to all the clients in a predetermined group, and broadcast as a communication scheme from the server to all the clients in the network:

> "a polling transmission section for polling the clients from which an ACK or NACK has not been received after file data was transmitted to the clients by means of broadcast or multicast, wherein in a polling mode with non-receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains IDs of the clients that need reply to the polling, whereas in a polling mode with receipt information, a packet for polling itself or notification of information prior to the polling is transmitted to said network by means of broadcast or multicast, wherein the packet contains ID of the clients that need not reply to the polling (see col. 28 lines 19-67);
>
> a detection section for detecting a number N of clients from which an ACK or NACK has not been received in response to the transmission of the file data from the server to the clients by means of broadcast or multicast (see col. 28 lines 19-67); and
>
> a switching section for switching between the polling mode with non-receipt information and the polling mode with receipt information in said polling transmission section based on the number N." (From claim 13, similar limitations are found in each claim)

These limitations are not found in the prior art nor are they obvious in view of the prior art.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

26. U.S. Patent 5,432,798 by Blair "Data communication method and system" July 11, 1995. Discloses the use packets with station identifier codes that are multicast to receiving stations. The packets include instructions for the specified station to acknowledge a number of messages.

27. U.S. Patent 5,570,367 by Ayanoglu et al. "Asymmetric protocol for wireless communications" October 29, 1996. Discloses polling when packets are unacknowledged.

28. U.S. Patent 6,151,696 by Miller et al. "Data Transmission" November 21, 2000. Discloses status requests messages being sent when messages are not received.

29. Barcellos, M. et al. "An End-to-End Reliable Multicast Protocol Using Polling for Scaleability" IEEE INFOCOM, pages 1180--1187, San Francisco, April 1998. Discloses a multicast protocol that uses polling to determine acknowledgements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Lazaro
April 13, 2006

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER